

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1 - 6 (Canceled)

Claims 7 - 12 (Canceled)

Claims 13 - 18 (Canceled)

Claims 18 - 19 (Canceled)

20. (Currently Amended) An isolated nucleic acid molecule selected from the group consisting of:

a) a nucleic acid molecule encoding a polypeptide comprising the amino acid sequence of SEQ ID NO:9;

b) a nucleic acid molecule encoding a polypeptide comprising the amino acid sequence of SEQ ID NO:8;

c) a nucleic acid molecule encoding a polypeptide consisting of the amino acid sequence of SEQ ID NO:9;

d) a nucleic acid molecule encoding a polypeptide consisting of the amino acid sequence of SEQ ID NO:8;

e) a nucleic acid molecule encoding a polypeptide which is at least 95% identical to the amino acid sequence of SEQ ID NO:9 and having peptide deformylase activity;

f) a nucleic acid molecule encoding a polypeptide which is at least 95% identical to the amino acid sequence of SEQ ID NO:8 and having peptide deformylase activity;

g) a nucleic acid molecule encoding a polypeptide comprising the amino acid sequence of SEQ ID NO:9 containing up to 10 conservative amino acid substitutions and having peptide deformylase activity; and

h) a nucleic acid molecule encoding a polypeptide comprising the amino acid sequence of SEQ ID NO:8 containing up to 10 conservative amino acid substitutions and having peptide deformylase activity

~~and purified polynucleotide sequence encoding an amino acid sequence of a plant peptide deformylase.~~

Claims 21 - 24 (Canceled)

25. (Currently Amended) A recombinant vector comprising the nucleic acid molecule ~~polynucleotide sequence~~ of claim 20.

Claim 26 (Canceled)

27. (Original) A host cell transformed with the recombinant vector of claim 25.

Claims 28 – 29 (Canceled).

30. (Currently Amended) A method of producing a plant peptide deformylase polypeptide comprising:

(a) transforming a suitable host cell with a recombinant vector of claim 25 ~~comprising a polynucleotide sequence encoding a plant peptide deformylase polypeptide, the gene being operably linked to suitable regulatory sequences; and~~

(b) growing the transformed cell under conditions where the peptide deformylase is expressed.

Claims 31 - 38 (Canceled)